

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A radio communication receiver comprising:  
analog signal generating units in number P (where P is a natural number more than  
one) each of which receives a signal and generates a base band analog signal from the  
received signal;

A/D converters in number P each of which converts the analog signal of the  
corresponding analog signal generating unit into digital signals; and  
a demodulator which demodulates the digital signal output by the corresponding A/D  
converter based on a desired method, the demodulator having, comprising:

soft-decision output equalizers in number P each of which makes a soft  
decision on the digital signal output by the corresponding A/D converter;  
a combining unit which combines sums up the results of the soft decisions by  
the soft-decision output equalizers and outputs the result as a soft-decision value; and  
an error correcting unit which performs error correction processing with  
respect to the soft-decision value output by the combining unit.

Claim 2 (Currently Amended): A radio communication receiver comprising:  
analog signal generating units in number P (where P is a natural number) each of  
which receives a signal and generates a base band analog signal from the received signal;  
A/D converters in number P each of which converts the analog signal of the  
corresponding analog signal generating unit into digital signals; and  
a demodulator which demodulates the digital signal output by the corresponding A/D  
converter based on a desired method, said demodulator having, comprising:

level-adjusting units in number P each of which adjusts a power level of the digital signal output by the corresponding A/D converter;

soft-decision output equalizers in number P each of which makes a soft decision with respect to the signal output by the corresponding level-adjusting unit;

a combining unit which returns a result of the soft decision to a status before the level adjustment, combines the results of the soft decisions by the soft-decision output equalizers at the original power levels and outputs the result as a soft-decision value; and

an error correcting unit which performs error correction processing with respect to the soft-decision value output by the combining unit.

Claim 3 (Currently Amended): A radio communication receiver comprising:

analog signal generating units in number P (where P is a natural number) each of which receives a signal and generates a base band analog signal from the received signal;

A/D converters in number P each of which converts the analog signal of the corresponding analog signal generating unit into digital signals; and

a demodulator which demodulates the digital signal output by the corresponding A/D converter based on a desired method, said demodulator having, comprising:

soft-decision output equalizers in number P each of which makes a soft decision on the digital signal output by the corresponding A/D converter;

noise-power estimating units in number P each of which estimates noise power of the digital signal output by the corresponding A/D converter;

a combining unit which divides results of the soft decisions by corresponding noise power respectively, and combines the results of the division to output a soft-decision value; and

an error correcting unit which performs error correction processing with respect to the soft-decision value output by the combining unit.

**Claim 4 (Currently Amended):** A radio communication receiver comprising:  
analog signal generating units in number  $P$  (where  $P$  is a natural number) each of which receives a signal and generates a base band analog signal from the received signal;  
A/D converters in number  $P$  each of which converts the analog signal of the corresponding analog signal generating unit into digital signals; and  
a demodulator which demodulates the digital signal output by the corresponding A/D converter based on a desired method, said demodulator ~~having~~, comprising:  
soft-decision output equalizers in number  $P$  each of which makes a soft decision on the digital signal output by the corresponding A/D converter based on common reliability information that is fed back after error correction;  
a combining unit which combines the results of the soft decisions by the soft-decision output equalizers and outputs the result as a soft-decision value; and  
an error correcting unit which performs error correction processing with respect to the soft-decision value output by the combining unit, generates reliability information of decoded bits, and feeds back the reliability information to the soft-decision output equalizers.